

WHAT IS CLAIMED IS:

1. A method for coating at least a portion of at least one medical appliance, comprising:
suspending the at least one medical appliance in a fluidizing gas flow;
directing a coating onto an ultrasonic nozzle, the ultrasonic nozzle directed towards
the at least one medical appliance; and
vibrating the ultrasonic nozzle at a rate sufficient to atomize the coating.
2. The method of claim 1, further comprising directing a further gas flow at the
ultrasonic nozzle, the further gas flow transporting the atomized coating to the at least one
medical appliance.
3. The method of claim 1, further comprising directing the fluidizing gas flow at the
ultrasonic nozzle, the fluidizing gas flow transporting the atomized coating to the at least one
medical appliance.
4. The method of claim 1, wherein the rate of vibration of the ultrasonic nozzle is
between about 48 kilohertz and about 122 kilohertz.
5. The method of claim 4, wherein the rate of vibration of the ultrasonic nozzle is about
122 kilohertz.
6. The method of claim 1, further comprising one of heating and cooling the fluidizing
gas flow.
7. The method of claim 1, wherein the coating includes a therapeutic agent.
8. The method of claim 1, wherein the at least one medical appliance includes at least
one stent.
9. The method of claim 8, wherein the at least one stent includes between about 200 and
about 600 stents.
10. The method of claim 8, wherein the at least one stent includes a flexible stent.

11. The method of claim 8, wherein the operation of directing the coating onto the ultrasonic nozzle includes causing a flow of the coating of about .5 milliliters per minute.
12. The method of claim 1, wherein the operation of suspending the at least one medical appliance with a fluidizing gas flow is performed in a hurricane.
13. The method of claim 12, wherein the ultrasonic nozzle is directed to the interior of the hurricane.
14. A device for coating at least one medical appliance, comprising:
 - a fluidizing gas source adapted to suspend the at least one medical appliance in a suspension area;
 - an ultrasonic nozzle directed at the suspension area and adapted to vibrate; and
 - a coating source adapted to direct coating onto the ultrasonic nozzle.
15. The device of claim 14, wherein the nozzle is adapted to vibrate at a rate sufficient to atomize the coating.
16. The device of claim 15, wherein the rate of vibration of the ultrasonic nozzle is between about 48 kilohertz and about 122 kilohertz.
17. The device of claim 16, wherein the rate of vibration of the ultrasonic nozzle is about 122 kilohertz.
18. The device of claim 14, further comprising a further gas source adapted to direct the atomized coating at the suspension area.
19. The device of claim 14, further comprising a hurricane enclosing the suspension area.
20. The device of claim 19, wherein the ultrasonic nozzle is mounted at a base of the hurricane.
21. The device of claim 19, wherein the ultrasonic nozzle is mounted at a side of the hurricane.

22. The device of claim 19, wherein the ultrasonic nozzle is mounted at a top of the hurricane.
23. A medical appliance having a coating applied by a method, the method comprising:
suspending the medical appliance with a fluidizing gas flow;
directing a coating onto an ultrasonic nozzle, the ultrasonic nozzle directed towards the medical appliance; and
vibrating the ultrasonic nozzle at a rate sufficient to atomize the coating.
24. The medical appliance of claim 23, wherein the method further comprises directing a further gas flow at the ultrasonic nozzle, the further gas flow transporting the atomized coating to the at least one medical appliance.
25. The medical appliance of claim 23, wherein the method further comprises directing the fluidizing gas flow at the ultrasonic nozzle, the fluidizing gas flow transporting the atomized coating to the at least one medical appliance.
26. The medical appliance of claim 23, wherein the rate of vibration of the ultrasonic nozzle is between about 48 kilohertz and about 122 kilohertz.
27. The medical appliance of claim 23, wherein the method further comprises one of heating and cooling the fluidizing gas flow.
28. The medical appliance of claim 23, wherein the medical appliance includes a stent.
29. The medical appliance of claim 28, wherein the stent includes a flexible stent.
30. The medical appliance of claim 23, wherein the operation in the method of directing the coating onto the ultrasonic nozzle includes causing a flow of the coating of about .5 milliliters per minute.
31. The medical appliance of claim 23, wherein the operation in the method of suspending the medical appliance with a fluidizing gas flow is performed in a hurricane.

32. The medical appliance of claim 31, wherein the ultrasonic nozzle is directed to an interior of the hurricane.
33. The medical appliance of claim 23, wherein the coating includes a therapeutic agent.
34. The medical appliance of claim 23, wherein the coating includes a masking material.
35. The medical appliance of claim 23, wherein the coating is chosen from a group consisting of a polymer with a suspended drug, a non-thrombogenic agent, a lubricious material, a non-slippery material, a radioactive agent, and a magnetic signature.
36. The medical appliance of claim 23, wherein the coating includes a radiopaque agent.